



Legislative Department
Seattle City Council
Memorandum

Date: March 8, 2010

To: Councilmember Sally J. Clark, Chair
Councilmember Tim Burgess, Vice Chair
Councilmember Sally Bagshaw, Member
Committee on the Built Environment (COBE)

From: Rebecca Herzfeld and Michael Jenkins, Council Central Staff

Subject: March 10, 2010 COBE Meeting: Updates to Multifamily Zones

To continue the review of regulations for Lowrise multifamily zones, we are requesting direction from the Committee on three topics:

1. Method for measuring height;
2. Height limits for Lowrise zones; and
3. Regulations for storage areas for solid waste containers.

We had intended to present information on parking requirements in urban villages, but have not completed our analysis, so we will be presenting that issue at the next regular COBE meeting.

1. Method for measuring structure height

At the COBE meeting on February 3, 2010, the Committee directed staff to investigate a simpler method for measuring structure height. The intent is to adopt a technique that applies in most zones (not only in multifamily zones), works well with Building Code requirements, addresses different site conditions, minimizes view blockage, and encourages well-designed buildings.

The Land Use Code currently establishes four methods of measuring structure height that apply in:

- 1) Downtown zones;
- 2) the South Lake Union urban center;
- 3) all other areas except shorelines; and
- 4) Shorelines.

The Building Code has a separate height measurement method, and structures must comply with both the Land Use and Building Codes. Architects and developers cite the number of height measurement methods and the complexity of the most commonly applied Land Use Code technique as major sources of confusion and frustration with Seattle's regulations. The Planning Commission has also recommended changing the height measurement method in order to simplify the Code and streamline plan review.

At this time, we are not recommending any change in the methods for zones in Downtown or South Lake Union, as they are specifically designed for highrise structures that are built to the lot line.

However, outside of these two areas, we recommend applying the height measurement method that is now used only in shorelines.

Attachment A to this memo compares the current Land Use Code method to the shoreline method, and also illustrates what is required by the Building Code. Attachment A also provides pros and cons for each technique. There are very few differences in how these methods apply on a flat site. It is on sloped lots that the differences between the Land Use Code and shoreline method become apparent.

The general Land Use Code technique results in a permissible building envelope that follows the slope, and a height limit that is essentially a sloping plane parallel to the sloping grade. By contrast, the shoreline and Building Code methods establish a height limit that is at a constant elevation, based on an average of the grade elevations at various sides or corners of the building. As a result, under those methods there may be a taller façade and greater building mass on the downhill side of the structure, but less height and mass on the uphill side.

The reason we are not recommending that the Building Code measurement method be applied through the Land Use Code is that it measures from finished, rather than existing grade. This means that a developer could gain height by adding a mound or berm to the property and measuring from that point. The shoreline method starts from *existing* grade, and avoids concerns about artificially raising the elevation of a lot to gain a height advantage.

We recommend using the shoreline code method for several other reasons. The current method requires a survey that shows elevations at two foot intervals, which can be costly. The shoreline method does not require this detailed level of survey data. The shoreline method is easier to understand and use than the current method, and because it is similar to the Building Code method, it would reduce the time needed to prepare and check permit documents. The shoreline method is required by the State for structures within the shoreline because it helps protect views, so adopting this method should provide benefits to up-hill neighboring properties. On sloping sites, because terracing of the building is not required, the resulting building form may be less costly to construct than under the current Land Use Code method.

While the shoreline method does not encourage buildings that terrace or step down a slope, applying the proposed floor area ratio (FAR) limit will help to reduce a structure's bulk. The option of using FAR limits was not considered when the Land Use Code method height measurement technique was first adopted.

The proposed changes to the height measurement section of the Land Use Code would read as follows, with new wording shown underlined and deleted text ~~crossed out~~. It is worth noting that the proposed method is explained in two sentences while the current technique requires five paragraphs to describe.

23.86.006 Structure height

A. ~~Height measurement technique in~~ In all zones except downtown zones and within the South Lake Union ~~Hub Urban Village~~ Urban Center, and except for the Living Building Pilot Program authorized by Section 23.40.060-, the height of structures shall be determined by

measuring from the average grade of the lot immediately prior to the proposed development to the highest point of the structure not otherwise excepted from the height limits. Calculation of the average grade level shall be made by averaging the elevations at the center of all exterior walls of the proposed building or structure.

~~1. The height shall be measured at the exterior walls of the structure. Measurement shall be taken at each exterior wall from the existing or finished grade, whichever is lower, up to a plane essentially parallel to the existing or finished grade. For determining structure height, the exterior wall shall include a plane between supporting members and between the roof and the ground. The vertical distance between the existing grade, or finished grade, if lower, and the parallel plane above it shall not exceed the maximum height of the zone.~~

~~2. When finished grade is lower than existing grade, in order for an upper portion of an exterior wall to avoid being considered on the same vertical plane as a lower portion, it must be set back from the lower portion a distance equal to two (2) times the difference between existing and finished grade on the lower portion of the wall (Exhibit 23.86.006 A1).~~

~~3. Depressions such as window wells, stairwells for exits required by other codes, "barrier free" ramps on grade, and vehicle access driveways into garages shall be disregarded in determining structure height when in combination they comprise less than fifty percent (50%) of the facade on which they are located. In such cases, the grade for height measurement purposes shall be a line between the grade on either side of the depression.~~

~~4. No part of the structure, other than those specifically exempted or excepted under the provisions of the zone, shall extend beyond the plane of the maximum height limit.~~

~~5. Underground portions of structures are not included in height calculations. The height of structures shall be calculated from the point at which the sides meet the surface of the ground.~~

Committee direction on height measurement method:

2. Height Limits in Lowrise Multifamily Zones

COBE has directed staff to consider two separate height increases: 1) increasing the height limit from 25 feet to 30 feet in the current LDT, L1, and L2 zones, and 2) and increasing the limit from 30 feet to 35 or 37 feet in L3 zones. These proposals are discussed in more detail below. They are intended to encourage better structure design, and more livable interior spaces with higher ceiling heights, and a greater variety of building types. We are also recommending continued use of the pitched roof height exception and other exceptions for rooftop features.

2A. Height limits in LDT, L1 and L2 zones

When Seattle's multifamily zones were revised in 1989, the height limits in the Lowrise zones were reduced. In the current Lowrise Duplex Triplex (LDT), Lowrise 1 (L1), and Lowrise 2 (L2) zones, the limit was reduced from 30 feet to 25 feet. At that time, the Council believed that lowering heights in these zones would mitigate the impacts of more density on neighboring single family (SF) zones. Instead, the lower height has led to poor design solutions, defined by inefficient floor heights and "tortured" unusual rooflines. While the intent of addressing the impacts of infill development was admirable, we are now seeing the unintended consequences.

While touring multifamily development last year, Councilmembers noted that the current 25 foot height limit prevents the construction of three full floors. Optimum floor to floor height for most wood frame construction is ten feet (nine feet from floor to ceiling plus a foot for structural supports), so it takes a height of 30 feet to attain three full floors. The 25 foot height limit results in floors of differing heights, often with a shorter, seven-foot third floor. In order to allow a person to stand upright, such a third floor requires a complex roof form with high sloping ceilings.

The townhouse on the right in the photograph below exemplifies this problem. All three floors have differing floor to ceiling heights, and the roofline attempts to regain space lost by the 25 foot height limit. While the design successfully solves the height limit problem, it creates visual impacts through an unusual roofline, blank facades, and differing floor heights. While the design of the structure on the left is more uniform, it has addressed the 25 foot limit by lowering the grade of the lot and partially burying the first floor, making the spaces within the units less desirable.



We recommend increasing the general height limit in the proposed LR1 and LR2 zones from 25 feet to 30 feet (the height limit for cottage housing would remain at 18 feet) as shown on Table 1 below. This five foot increase in height would allow developers the flexibility needed to provide improved designs. In addition, increasing the height limit would help encourage apartment construction in the new LR2 zone. The 25-foot height limit in the current L2 zone is likely responsible for the lack of apartment construction there, as the reduced floor heights make development of three story apartment buildings impractical. Setting the height limit at 30 feet would increase the variety of

housing provided in multifamily zones, and would help meet the City’s growth targets. In comments made last fall, the Planning Commission strongly urged Council to restore height limits to 30 feet for LDT, L1 and L2 zones.

Table 1: Comparison of Current and Proposed Height Limits in LDT, Lowrise 1 and 2 Zones

Zoning		Multifamily Housing Types					
		Cottage Housing		Rowhouses and Townhouses		Apartments	
New Zone Category	Current Zone Category	Current Height Limit	Proposed Height Limit	Current Height Limit	Proposed Height Limit	Current Height Limit	Proposed Height Limit
Lowrise 1 (LR1)	Lowrise Duplex Triplex (LDT)	18’	18’ ⁽¹⁾	25’	30’	25’	30’
Lowrise 2 (LR2)	Lowrise 1 and Lowrise 2 (L1 and L2)	18’	18’ ⁽¹⁾	25’	30’	25’	30’

⁽¹⁾ The height limit would be 20 feet for carriage house dwelling units located above a garage, and for other accessory dwelling units.

During the development of the Executive proposal, some commenters expressed concern that an increase in height from 25 feet to 30 feet would create buildings on lots next to SF zones that are out of scale and would dominate the house next door. If Committee members agree with this concern, we recommend addressing this issue through other compatibility requirements, such as increasing the side setback for a multifamily building when it abuts a single family zoned lot, adopting standards for walls facing a SF zone, and/or requiring increased landscaping. Another option is to use administrative design review to address the transition between single family and multifamily zones. This option has the advantage of allowing the design requirements to be tailored to specific site conditions.

Committee direction on increasing height limits from 25 feet to 30 feet in LR1 and LR2 zones:

2B. Height limits in L3 and L4 zones

At the last COBE meeting on February 24, you directed staff to work on combining the current L3 and L4 zones into one new Lowrise 3 (LR3) zone. We now need to consider what the height limit should be in LR3 zones. The height limit in the current L3 zone was lowered in 1989, from 37 feet to 30 feet. The height limit in L4 zones is 37 feet. A four-story building can be squeezed into 37 feet, if floors with ceilings heights of less than nine feet are used. However, the height reductions made in 1989 effectively removed four-story apartment buildings as a potential housing type in multifamily zones, because only 211 acres (6%) of all lowrise zoned land is zoned L4. Of this amount, almost half is taken up by Seattle Housing Authority’s High Point development. In contrast, 1,840 acres are currently zoned L3.

To make it possible again to build four-story apartment buildings, and to allow those structures achieve the optimum nine foot floor to ceiling height, we are proposing that the height limit in LR3 zones be increased. However, we are proposing that this increase only be applied when the zone is located in an urban center, village, or station area.

Table 2: Comparison of Current and Proposed Height Limits in Lowrise 3 and 4 Zones

Current Zone Category	Location	Rowhouses and Townhouses		Apartments	
		Current Height Limit	Proposed Height Limit	Current Height Limit	Proposed Height Limit
Lowrise 3 (L3)	Outside UVs, UCs & SAODs ⁽¹⁾	30'	30'	30'	30'
Lowrise 3 (L3)	Inside UVs, UCs and SAODs ⁽¹⁾	30'	30'	30'	40'
Lowrise 4 (L4)	Outside UVs, UCs & SAODs ⁽¹⁾	37'	30'	37'	30'
Lowrise 4 (L4)	Inside UVs, UCs and SAODs ⁽¹⁾	37'	30'	37'	40'

⁽¹⁾UVs=Urban Villages; UCs=Urban Centers; and SAODs=Station Area Overlay Districts.

As shown in Table 2, we are proposing that outside of urban villages, urban centers, and station areas (called designated growth areas in this memo), the height limit in the current L3 zone would remain at 30 feet (cottage housing would have an 18 foot height limit, but this type of housing is not likely to be built in an L3 or L4 zone). Inside the designated growth areas, the height limit would be increased to 40 for apartments, but would remain at 30 feet for ground-related housing such as rowhouses and townhouses. This would help encourage apartment development in areas that are intended for more growth.

In the current L4 zones, the height limit outside of designated growth areas would be lowered to 30 feet from 37 feet. Of the 211 acres currently zoned L4, 94 acres are outside designated growth areas, of which all but one acre is in the Seattle Housing Authority High Point development. If the staff proposal is approved, buildings at High Point that are taller than 30 feet would become nonconforming. While any new buildings constructed at High Point would have to meet the new height limit, all existing structures could be maintained. The remaining one acre of L4 that is located outside of designated growth areas is a half block on the west side of California Ave SW between SW Seattle Street and SW Atlantic Street. Lowering the height limit to 30 feet would remove one floor of development potential from the lots on this half block.

The remaining 116 acres of L4 zoning is located within designated growth areas. In these areas, the height limit for ground-related units would be reduced from 37 to 30 feet, and the height limit for apartments would be increased by three feet, to 40 feet. The extra three feet makes it easier to build a four-story apartment building with appropriate floor to ceiling heights.

The proposed height limits in LR3 zones would allow adequate height to permit well-designed townhouses and rowhouses, while providing incentives to develop apartments and allowing greater development potential in urban villages, urban centers, and station areas. The Planning Commission also supports increasing the height limit in L3 zones, although they have not had a chance to comment on the idea of differentiating the areas inside and outside of designated growth areas, or setting the height limit at 40 rather than 37 feet.

The following code language would implement the staff recommendations for height limits in LR1, LR2, and LR3 zones. New wording shown underlined and deleted text ~~crossed out~~.

23.45.514 Structure height in ~~Midrise and Highrise~~ zones

A. Subject to the additions and exemptions allowed as set forth in this Section 23.45.514, structure heights permitted in Lowrise zones are as shown on Table A for 23.45.514, and the Bbase and maximum structure heights permitted in Midrise and Highrise zones are as shown in Table ~~AB~~ B for 23.45.514, ~~subject to the additions and exemptions allowed as set forth in this Section 23.45.514.~~ The maximum height for accessory structures, except accessory dwelling units, is 12 feet.

Table A for 23.45.514: Structure Height for Lowrise Zones

	<u>LR1</u>	<u>LR2</u>	<u>LR3 outside urban centers & villages and station area overlay zones</u>	<u>LR3 in urban centers & villages and station area overlay zones</u>
<u>Cottage Housing</u>	<u>18'⁽¹⁾</u>	<u>18'⁽¹⁾</u>	<u>18'⁽¹⁾</u>	<u>18'⁽¹⁾</u>
<u>Rowhouses and Townhouses</u>	<u>30'</u>	<u>30'</u>	<u>30'</u>	<u>30'</u>
<u>Apartments</u>	<u>30'</u>	<u>30'</u>	<u>30'</u>	<u>40'</u>
⁽¹⁾ The height limit is 20 feet for carriage house dwelling units located above a garage and other accessory dwelling units meeting the standards in this Chapter.				

Table AB for 23.45.514: Structure Height for Midrise and Highrise Zones

	<u>MR</u>	<u>MR/85</u>	<u>HR</u>
Base height limit	60'	85'	160'
Maximum height limit if extra residential floor area is gained under Chapter 23.58A and Section 23.45.516	75'	85'	240' or 300'

* * *

The following code section would be deleted:

~~23.45.009 Structure height -- Lowrise zones.~~

~~A. Maximum Height. The maximum height permitted for all structures, except for cottage housing developments, shall be as follows:~~

- ~~Lowrise Duplex/ Triplex — Twenty five (25) feet~~
- ~~Lowrise 1 — Twenty five (25) feet~~
- ~~Lowrise 2 — Twenty five (25) feet~~
- ~~Lowrise 3 — Thirty (30) feet~~
- ~~Lowrise 4 — Thirty seven (37) feet.~~

Committee direction on changing the height limits in L3 and L4 zones

2C. Features that allow a structure to exceed the height limit

The current Lowrise multifamily zones permit certain parts of the building to extend above the height limit, including pitched roofs, dormers, stair and elevator penthouses, as well as rooftop features such as planters, greenhouses, and wind power generators. We recommend that these height exceptions continue to apply, and that they be moved to Section 23.45.514, the Code section that sets the height limits for all multifamily zones. However, if you approve a 30 foot height limit for the new LR1 and LR2 zones, the provision allowing a roof pitched at 6:12 to exceed the height limit by ten feet should be eliminated. This exception now applies only to zones with 25 foot height limits, and would no longer be needed.

We expect to return to the Committee with further recommendations to encourage the first floor of structures to be elevated above the street, in order to provide more privacy for units on the first floor and encourage better design features at street level. This is similar to the exception adopted by the Council last year for apartments in Midrise zones. However, we have not yet fully analyzed where this exception might need to be applied.

Committee direction on allowing features above the height limit in Lowrise zones:

3. Regulations for storage areas for solid waste containers

The changes to the multifamily zoning proposed last year by DPD included an update to the standards for storage areas for solid waste containers. The regulations proposed by DPD would apply citywide, not just in multifamily zones. The proposed requirements more than quadrupled the space required to be set aside for such containers for developments with fewer than 16 units, from approximately 36 to 150 square feet. The proposed storage space was required to be shared, even when units were intended to be sold individually.

One of the three teams of experts commissioned by the Council who analyzed the proposed Lowrise zone changes last September identified this as one of their concerns. The team's recommendations stated that the "150 square foot common waste disposal area for small projects is ridiculous. Require common garbage space for apartments; allow individual cans for ground based housing."

Due to this concern, we worked with staff from DPD and Seattle Public Utilities (SPU) to review the proposed standards, and are recommending four major changes to the proposal:

Recommendation 1. Require housing units that are billed individually for garbage service to provide an individual space large enough for garbage, recycling, and clean green containers (2 feet by 6 feet). The original DPD proposal did not address requirements for individual units.

Recommendation 2. Provide a choice for developments that are billed for garbage pickup as a single entity. Such developments may provide either individual or shared storage spaces, depending on what works best for the specific site and housing type.

Recommendation 3. Set different requirements for shared storage space for buildings with two to eight units and buildings with 9 to 15 units. This allows the requirements for buildings with fewer units to be of a smaller, more reasonable size. We are also proposing minimum dimensions for the storage spaces that match the proposed minimum areas.

Recommendation 4. Establish requirements for the location of solid waste containers that are ready for pick-up. On lots without alleys, containers have blocked bus stop waiting areas, or required a garbage truck to stop in a lane dedicated to bus rapid transit. This would no longer be permitted, and the developer would have to designate a pick-up location that minimizes blockage of pedestrian movement. In addition, the new provisions would recognize that the planting strip is often used to store containers on pickup day, and that the Green Factor landscaping requirement may make it difficult to use the planting strip for this purpose. We may propose amendments to the Green Factor requirements to further address this issue.

As proposed last year by DPD, the standards for solid waste storage areas would be consolidated into a single section of the Land Use Code, rather than repeating them in each zone chapter. The proposed new section would read as follows. Although all the language below is new to the Code, we have underlined only those provisions that are different from the 2009 DPD proposal.

23.54.040 Solid waste and recyclable materials storage and access

A. Storage space for solid waste and recyclable materials containers shall be provided for all new structures permitted in downtown, multifamily and NC or C zones and for existing structures when expanded by two or more units as shown in Table A for 23.54.040.

1. Townhouse and other residential development intended for fee simple ownership must meet the provisions for individual service and provide one, 2 foot by 6 foot storage area per unit;

2. Residential development for which a home ownership association or other single entity exists or will exist as a sole source for utility billing may meet the provisions for individual or shared service.

3. Nonresidential development shall meet the provisions for shared service.

Table A for 23.54.040, Shared storage for residential and nonresidential development*

Residential Development	Minimum Area for <u>Shared Storage Space</u>
<u>2-8 units</u>	<u>84 square feet</u>
<u>9-15 units</u>	<u>150 square feet</u>
16-25 units	225 square feet
26-50 units	375 square feet
51-100 units	375 square feet plus 4 square feet for each additional unit above 51
More than 100 units	575 square feet plus 4 square feet for each additional unit above 100, except as permitted in Subsection C
Nonresidential Development	Minimum Area for <u>Shared Storage Space</u>
0--5,000 square feet	82 square feet
5,001--15,000 square feet	125 square feet
15,001--50,000 square feet	175 square feet
50,001--100,000 square feet	225 square feet
100,001--200,000 square feet	275 square feet
200,001 plus square feet	500 square feet
*Mixed use development, with both residential and nonresidential use, shall meet the requirements of subsection B.	

B. Mixed use development shall meet the storage space requirements shown in the table for residential development, plus 50 percent of the requirement for nonresidential development. In mixed use development, storage space for garbage may be shared between residential and nonresidential uses, but separate spaces for recycling shall be provided.

C. For development with more than 100 units, the required minimum area for storage space may be reduced by 15 percent, if the area provided as storage space has a minimum horizontal dimension of 20 feet.

D. The design of the storage space shall meet the following requirements:

1. For shared service, development with 8 units or fewer, the minimum horizontal dimension (width and depth) for required storage space is 7 feet. Development with 9 units or more, the minimum horizontal dimension of required storage space is 12 feet.

2. The floor of the storage space shall be level and hard-surfaced (garbage or recycling compactors require a concrete surface); and

3. If located outdoors, the storage space shall be screened from public view and designed to minimize light and glare impacts.

E. The location of the storage space shall meet the following requirements:

1. The storage space shall be located on the lot of the structure it serves and, if located outdoors, it shall not be located between a street-facing facade of the structure and the street;

2. The storage space shall not be located in any required driveways, parking aisles, or parking spaces for the structure;

3. The storage space shall not block or impede any fire exits, any public rights-of-ways or any pedestrian or vehicular access;

4. The storage space shall be located to minimize noise and odor to building occupants and neighboring development;

5. The storage space shall meet the contractor safety standards promulgated by the Director of Seattle Public Utilities; and

6. The storage space shall not be used for purposes other than solid waste and recyclable materials storage and access.

F. Access for service providers to the storage space from the collection location shall meet the following requirements:

1. For containers 2 cubic yards or smaller:

a. Containers to be manually pulled shall be placed no more than 50 feet from a curbcut or collection location;

b. Collection location shall not be within a bus stop or within the right-of-way area abutting a vehicular lane designated as a sole travel lane for a bus;

c. Access ramps to the storage space shall not exceed a grade of 6 percent; and

d. Any proposed gates or access routes for trucks shall be a minimum of 10 feet wide.

2. For containers larger than 2 cubic yards and all compacted refuse containers:

a. Direct access shall be provided from the alley or street to the containers;

b. Any proposed gates or access routes for trucks shall be a minimum of 10 feet wide;

c. Collection location shall not be within a bus stop or within the street right-of-way area abutting a vehicular lane designated as a sole travel lane for a bus;

d. When accessed directly by a collection vehicle, whether into a structure or otherwise, a 21 foot overhead clearance shall be provided.

G. Access for occupants to the storage space from the collection location shall meet the following requirements:

1. Direct access shall be provided from the alley or street to the containers;

2. A pick-up location within 50 feet of a curbcut or collection location shall be designated that minimizes any blockage of pedestrian movement along a sidewalk or other right-of-way;

3. When a planting strip is designated as a pick-up location, measures to accommodate solid waste and recyclable containers within this area shall be considered in meeting the green factor provisions of 23.45.525 and 23.86.019.

H. The solid waste and recyclable materials storage space, access and pick-up specifications required in this section 23.54.040, including the number and sizes of containers, shall be included on the plans submitted with the permit application.

I. The Director, in consultation with the Director of Seattle Public Utilities, has the discretion to grant departures from the requirements of this section, as a Type I Master Use Permit decision, when the applicant proposes alternative, workable measures that meet the intent of this Section 23.54.040 and when either:

1. The applicant can demonstrate difficulty in meeting any of the requirements of this section; or
2. The applicant proposes to construct or expand a structure, and the requirements of this section conflict with opportunities to increase residential densities and/or retain ground-level retail uses.

Committee direction on requirements for storage of solid waste containers:

Next Steps

The next COBE discussion of multifamily zoning will be at a special meeting on Saturday, March 20, at the Taproot Theater in Greenwood (204 N 85th St), from 10 a.m. to noon. The focus of the meeting will be “Rowhouses, Apartments & Townhomes – New Rules for the Road”.

The topics for the regular COBE meeting on March 24th will be: Parking requirements in urban villages, FAR and density limits, setback requirements, and structure width and depth limits.

Attachment A: Comparison of Height Measurement Methods